

ABSTRACT

An information-recording method and an information-recording medium which make it possible to improve overwrite characteristics in the high speed recording, especially archival overwrite characteristics for overwriting information after retaining the medium in a high temperature environment for a certain period of time, and an information-recording apparatus based on the use of the same are provided. The information-recording method comprises overwriting a random pattern with light beams having a predetermined recording power and a variety of erasing powers; reproducing the random pattern to determine a minimum value $Pb1$ and a maximum value $Pb2$ of the erasing power obtained when the pattern, in which a reproduction jitter exceeds a predetermined threshold value, is erased; determining an optimum erasing power Pb from the minimum value $Pb1$, the maximum value $Pb2$, and a relational expression represented by $Pb = \alpha \times Pb1 + (1 - \alpha) \times Pb2$; and recording the information with the determined optimum erasing power Pb . The value of α is previously recorded on the information-recording medium. The information-recording apparatus has a Pb -calculating control unit which reads the value of α when the optimum erasing power Pb is determined.